

CLAIMS

1. (Previously Presented) A service managing apparatus for managing an information transmission service in which digital content is sent in real time between communication devices connected to each other over a network , the apparatus comprising:

a communication controlling means for controlling the communication with each of the communication devices;

an information registering means for maintaining registration information on more than one piece of digital content available from those of the communication devices that are registered as an information provider; and

an information managing means for dynamically generating, based on the registration information, choices-window information from which selection is made of a desired one of the plurality of pieces of offered digital content by those of the communication devices that are to receive the desired piece of offered digital content,

the information managing means updating, when the registration information has been updated based on updating information reflecting the current status of the information provider, the choices-window information on the basis of the updated registration information, wherein the choices-window information includes information indicative of whether the communication device that is the information provider can currently provide the offered digital content in real time, and

wherein the communication controlling means controls the connection between the communication device that receives the desired piece of offered digital content and the communication device that is the information provider, with the desired piece of offered digital content being provided in real time when it is indicated as currently available in real time.

2. (Cancelled).

3. (Previously Presented) The apparatus according to claim 1, wherein the information managing means generates the choices-window information from which selection is available only for digital content that can currently be provided in real time.

4. (Previously Presented) The apparatus according to claim 1, wherein the updating information includes types of more than one media which can be used for the real-time provision of the offered digital content.

5. (Canceled).

6. (Original) The apparatus according to claim 1, wherein:
the information managing means receives the registered information and registers it into the information registering means; and
the communication device receives the updating information and updates the registered information.

7. (Previously Presented) The apparatus according to claim 6, wherein the communication controlling means receives the updating information from the communication device which provides the digital content in real time.

8. (Previously Presented) A service managing method of managing an information transmission service in which digital content is sent in real time between communication devices connected to each other over a network, the method comprising:

an information managing step in which, referring to an information registering means in which information on more than one piece of offered digital content available from those of the communication devices that are registered as an information provider is maintained as registration information, there is dynamically generated choices-window information from which selection is made of a desired one of the plurality of pieces of offered digital content by those of the communication devices that are to receive the desired piece of offered digital content,

an information updating step of updating, when the registration information has been updated based on updating information reflecting the current status of the information provider, the choices-window information on the basis of the updated registration information, wherein the

choices-window information includes information indicative of whether the communication device that is the information provider can currently provide the offered digital content in real time, and a controlling step of controlling the connection between the communication device that receives the desired piece of offered digital content and the communication device that is the information provider, with the desired piece of offered digital content being provided in real time when it is indicated as currently available in real time.

9. (Cancelled).

10. (Previously Presented) The method according to claim 8, wherein in the information managing step, there is generated the choices-window information from which selection is available only for digital content that can currently be provided in real time.

11. (Previously Presented) The method according to claim 8, wherein the updating information includes types of more than one media which can be used for the real-time provision of the offered digital content.

12. (Canceled).

13. (Previously Presented) The method according to claim 8, wherein in the information updating step, the choices-window information is updated based on the registered information updated with the updating information received from the communication device which provides the offered digital content in real time.

14. (Previously Presented) A service providing system which provides an information transmission service in which digital content is sent in real time between communication devices connected to each other over a network, the system comprising:

a plurality of communication devices to provide or receive offered digital content to be provided by an information provider or to be used by an information user, respectively, each as a user of the information transmission service,

each of the communication devices including a communication means for sending or receiving offered digital content to or from the other communication device as a counterpart; and

a service management device connected to each of the communication devices via a network to manage the information transmission service,

the service management device including:

a communication controlling means for controlling the communication with each of the communication devices;

an information registering means for maintaining registration information on more than one piece of digital content available from those of the communication devices that are registered as information providers; and

an information managing means for dynamically generating, based on the registration information, choices-window information from which selection is made of a desired one of the plurality of pieces of offered digital content by those of the communication devices that are to receive the desired piece of offered digital content,

the information managing means updating, when the registration information has been updated based on updating information reflecting the current status of the information provider, the choices-window information on the basis of the updated registration information, wherein the choices-window information includes information indicative of whether the communication device that is the information provider can currently provide the offered digital content in real time, and

wherein the communication controlling means controls the connection between the communication device that receives the desired piece of offered digital content and the communication device that is the information provider, with the desired piece of offered digital content being provided in real time when it is indicated as currently available in real time.

15. (Cancelled).

16. (Previously Presented) The system according to claim 14, wherein:
the communication controlling means updates the information registering means when the information user has been authenticated with the user identification information..

17. (Previously Presented) The system according to claim 16, wherein:
the updating information includes media information indicative of the type of a media which can be used by the communication device to send the offered digital content when providing the offered digital content; and
the communication controlling means updates the information registering means with the information indicative of whether the information provider can currently provide the offered digital content and media information included in the updating information.

18. (Canceled).

19. (Previously Presented) The system according to claim 14, wherein:
the updating information includes information indicative of the position of the communication device which sends the offered digital content; and
the communication controlling means controls, based on the position information, the connection between the communication device that receives the desired piece of offered digital content and the communication device that is the information provider.

20. (Previously Presented) The system according to claim 14, wherein:
the communication controlling means includes a call controlling means for sending and receiving a connection control signal for establishing the connection between the communication device that receives the desired piece of offered digital content and the communication device that is the information provider; and
the connection controlling means receives the connection control signal from the call controlling means in the communication device and controls the connection between both the communication devices.

21. (Previously Presented) A service providing method for a service providing system including a plurality of communication devices to send or receive offered digital content to be provided by an information provider or to be used by an information user, respectively, each as a user of the information transmission service in which information is sent from one of communication devices connected to each other over a network to the other, and vice versa, in real time, and a service management device connected to each of the communication devices via the network to manage the information transmission service, the method comprising:

an information registering step in which information on more than one piece of offered digital content available from those of the communication devices that are registered as information providers is maintained as registration information into an information registering means of the service management device;

an information managing step in which, referring to an information registering means of the information management device in the service management device, there is dynamically generated choices-window information from which an information user of the offered digital content selects a desired one of the plurality of pieces of offered digital content for the communication device that is to receive the desired piece of offered digital content;

a registered information updating step of updating the registration information on the basis of updating information reflecting the current status of the information provider;

a choices-window information updating step in which an information management means updates, when the information registering means has been updated based on the updating information, the choices-window information on the basis of the updated registration information, wherein the choices-window information includes information indicative of whether the communication device that is the information provider can currently provide the offered digital content in real time; and

a controlling step of controlling the connection between the communication device that receives the desired piece of offered digital content and the communication device that is the information provider, with the desired piece of offered digital content being provided in real time when it is indicated as currently available in real time.

22. (Cancelled).

23. (Previously Presented) The method according to claim 21, wherein:

the updating information includes information indicative of the type of a media which can be used when providing the offered digital content; and

in the choices-window information updating step, the choices-window information is made to reflect the information indicative of whether the information provider can currently provide the offered digital content in real time and media information included in the updating information.

24. (Canceled).

25. (Previously Presented) The method according to claim 21, wherein:

the updating information is indicative of the position of the communication device which sends the offered digital content; and in the controlling step, there is controlled, based on the position information, the connection between the communication device which sends the selected offered digital content and that which has selected the desired offered digital content.

26. (Previously Presented) The apparatus according to claim 1, wherein the digital content is video content.

27. (Previously Presented) The apparatus according to claim 1, wherein the digital content is audio content.

28. (Previously Presented) The method according to claim 8, wherein the digital content is video content.

29. (Previously Presented) The method according to claim 8, wherein the digital content is audio content.

30. (Previously Presented) The system according to claim 14, wherein the digital content is video content.

31. (Previously Presented) The system according to claim 14, wherein the digital content is audio content.

32. (Previously Presented) The method according to claim 21, wherein the digital content is video content.

33. (Previously Presented) The method according to claim 21, wherein the digital content is audio content.

34. (Previously Presented) The apparatus according to claim 1, wherein the communication devices are voice over internet protocol devices, and wherein when selection is made of a desired one of the plurality of pieces of offered digital content, the communication controlling means establishes a session between the communication device that receives the desired piece of offered digital content and the communication device that is the information provider to accommodate providing the offered digital content in real time.

35. (Previously Presented) The apparatus according to claim 34, wherein the communication controlling means establishes the session between the communication devices without requiring user input of connection addresses from the respective communication devices.

36. (Previously Presented) The method according to claim 8, wherein the communication devices are voice over internet protocol devices, and wherein when selection is made of a desired one of the plurality of pieces of offered digital content, the controlling step establishes a session between the communication device that receives the desired piece of offered digital content and the

communication device that is the information provider to accommodate providing the offered digital content in real time.

37. (Previously Presented) The method according to claim 36, wherein the session is established between the communication devices without requiring user input of connection addresses from the respective communication devices.

38. (Previously Presented) The system according to claim 14, wherein the communication devices are voice over internet protocol devices, and wherein when selection is made of a desired one of the plurality of pieces of offered digital content, the communication controlling means establishes a session between the communication device that receives the desired piece of offered digital content and the communication device that is the information provider to accommodate providing the offered digital content in real time.

39. (Previously Presented) The system according to claim 38, wherein the communication controlling means establishes the session between the communication devices without requiring user input of connection addresses from the respective communication devices.